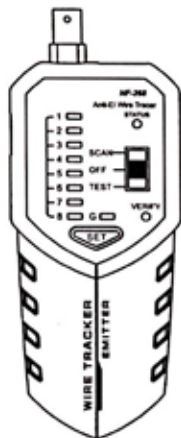
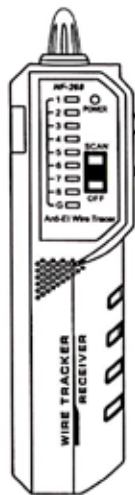


## Brief Introduction

The service manual for user here covers all products of NF-268 (all instructions are suitable for all products as shown in figure below unless there is another regulation):



Emitter



Receiver

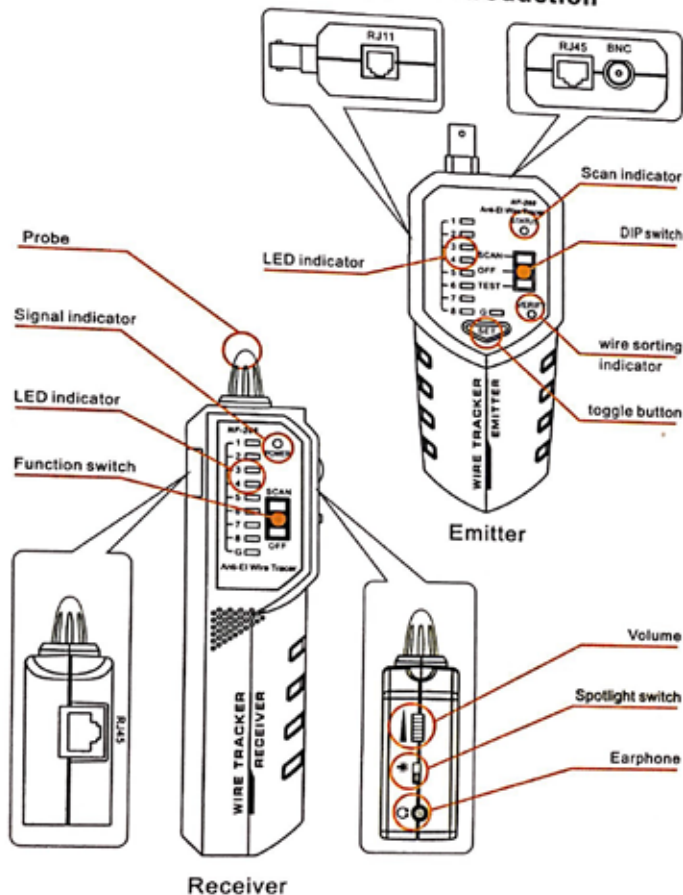
## Overview

NF-268 is an updated item after NF-168. Composed of emitter and receiver, it owns three main functions of hunting, wire sorting and circuit status testing. Compared to series products, it highlights for its strong anti- electromagnetic interference ability, and locating short point accurately, which enables user trace and verify cable more smoothly.

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# 1. Product Interface and Keypad Introduction



## 2. Operations

### 2.1 Cable tracing

2.1.1) Open battery cover, install DC 9V battery in launcher, push the key of emitter to "scan", the indicator flashes, which means the emitter is normal.

2.1.2) Connect the cable to be tested to corresponding port.

2.1.3) Push the key of receiver to "Scan", the indicator flashes, which means the emitter is normal. Then hold the receiver to trace cable.

During operation, users can alter the volume gradually to ideal state.

Attention:  
1) If the cable to be traced is energized ( $\pm 60VDC$ ), users have to turn the volume to degree 1-3.

2) If the cable to be traced is non-energized, users have to turn the volume to degree 6-8.

### 2.2 Cable mapping (Never to used on a live circuit.)

2.2.1) Connect network line to the RJ45 port of emitter and receiver separately.

2.2.2) Push the key of receiver to "Test", the indicator flashes, which means the emitter is normal. then go ahead with the test result.

(Note: users can press "SET" to choose the testing speed)

2.2.3) When the tested cable is in good connection, if UTP cable, No. 1-8 leds will blink one by one in circulation.

Emitter: 1-2-3-4-5-6-7-8

Receiver: 1-2-3-4-5-6-7-8

If STP cable, No. 1-8 & G leds will blink one by one in circulation.

Emitter: 1-2-3-4-5-6-7-8-G

Receiver: 1-2-3-4-5-6-7-8-G

2.2.4) When the tested cable is not connected well

If No. 2 & No. 3 cables are shorted, the No. 2 & 3 Leds of receiver won't be on, while No. 1-8 leds of emitter is still on in circulation.

If No. 2 cable is open, the No. 2 led of emitter and receiver won't be on.

If more than 2 cables is disconnected, the corresponding leds won't be on.

If less than 2 cables is disconnected, all the leds won't be on.

If No.2 & No.3 is misorder, it will show as below

Emitter: 1-2-3-4-5-6-7-8-G

Receiver:1-3-2-4-5-6-7-8-G

### 3.Main functions

3.1 trace STP/UTP network cable (connected with exchanger or switch as below)



Connect the network cable to be tested to RJ45 port. Push the key of receiver to "Scan", the indicator flashes, which means the receiver is normal. Then hold the receiver to trace cable, keep the probe close to cables and judge the volume.

When loudest voice is heard, it means it is the targeted cable.

*Note: in this case, users should alter the volume to degree 1-3 in order to find out targeted cable precisely*

3.2 trace energized telephone cable (connected with exchanger or switch as below)

Attention not to insert telephone cable into RJ45 Port, in fear of burnout to the tester.

Connect the telephone cable to be tested to RJ11 port. Then hold the receiver to locate the targeted cable as what 3.1 said.

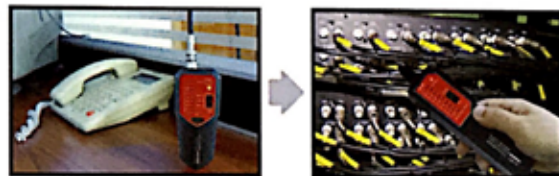
*Note: in this case, users should alter the volume to degree 1-3 in order to find out targeted cable precisely.*



3.3 trace monitoring cable (connected to monitor as below)

Connect the telephone cable to be tested to RJ11 port. Then hold the receiver to locate the targeted cable as what 3.1 said.

*Note: in this case, users should alter the volume to degree 1-3 in order to find out targeted cable precisely.*



3.4 check short location of non-energized wires (as below)

Connect the bared wires with the two clips, push the key to "scan". Keep the probe close to wire, it means normal if "beep" emits. Then move the probe along the wire, the point is short circuit when no "beep" comes out.

*Note:*

- 1) the tested wire must be non-energized.
- 2) turn the volume to degree 6-8 when tracing cable.
- 3) Clip 2 cores to tested



3.5 Check breakage location of non-energized wires (as below)  
Connect a broken wires with the two clips, push the key to "scan".  
Keep the probe close to wire, it means normal if "beep" emits. Then  
move the probe along the wire, the point is breakage when no "beep"  
comes out.

Note:

- 1) clip one core with red clamp, keep the black one free.
- 2) turn the volume to degree 6-8 when tracing cable.
- 3) Clip one core to tested.



### 3.6 Network cable mapping

3.6.1) If the tested cable is in good connection, No.1-8 & G leds will be on and blink in circulation.

3.6.2) If No. 2 & No.3 cables are broken, the No.2 led of emitter and receiver won't be on. The others blink normally.

3.6.3) If No. 2 & No.3 cables are shorted, the No.2 & 3 Leds of receiver won't be.

No.1-8 leds of emitter works normally.



### 3.7 Unique function

When users have targeted the network cable, at this time, he can directly insert the cable into RJ45 port of receiver to check its wiremap. If leds No.1-8 is on, it means the cable is normal. If not, the cable is abnormal. The details can be read from Chapter 3.6.



### Other functions:

#### (1) Low-voltage hint function

When the battery voltage is low (<math>\leq 6V</math>) push the function button to "scan" or "test", at this time, both the scan indicator and wire sorting indicator will flash, which means the battery should be replaced.

#### (2) Earphone function

The earphone can be worn in noisy environment for operation so as to avoid external interference.

#### (3) Volume adjustment function

Turn volume adjustment switch on the receiver when tracing cable to adjust the volume to the appropriate degree.

#### (4) Floodlight function

The side floodlight can be started at night or in dark.

The floodlight turns on so as to facilitate your normal operation.

## Specification:

Item	Specification	
Product name	Wire tracker	
Power supply	DC, 9V battery	
The max working current	Emitter	≤20mA
	Receiver	≤30mA
Signal transmission format	Multi-frequency impulse	
Signal output electric status	8Vp-p	
Distance of signal transmission	≥3km	
Appearance dimension	Emitter	146×57×30 mm
	Receiver	187×46×27 mm
	Whole set	285×150×46 mm
Weight (without batteries)	Emitter	0.08kg
	Receiver	0.08kg
	Whole set	0.16kg

## Packing list

1. Emitter	1PCS	6. RJ45 adapter line	1PCS
2. Receiver	1PCS	7. Cable Clip	1PCS
3. Laminated battery of 9V	2PCS	8. User manual	1PCS
4. Earphone	1PCS	9. Kit	1PCS
5. RJ11 Adapter line	1PCS	10. Color box	1PCS

## Diagram of series products



NF-868



NF-300



NF-8601



NF-806B



NF-800



NF-816



NF-468L



NF-820



NF-2100



NF-708



NF-905



NF-911